unpatentable over Mozer, in view of well-known prior art; and (iii) rejected claims 1-5, 9-12 and 18 under §103(a) as being unpatentable over Mozer, in view of U.S. Patent No. 6,044,347 to Abella et al. (hereinafter "Abella").

In response, Applicants traverse the §102(e) and §103(a) rejections for at least the reasons set forth below. Applicants respectfully request reconsideration of the present application in view of the following remarks.

Claims 6, 7, 13, 14 and 19 stand rejected under §102(e) as being anticipated by Mozer. Specifically, with regard to independent claims 6 and 19 which are of similar scope, the Examiner contends that Mozer discloses all of the elements set forth in these claims. Applicants respectfully disagree with this contention. Mozer is directed to a speaker independent speech recognition system that is configured to recognize a relatively large number of utterances by a relatively simple recognition engine (Mozer; page 4, paragraph 0040). This is accomplished by organizing the user utterances into a plurality of recognition sets and associated weight sets. A pattern recognition programming system controls the selection of a current recognition set and weight set via an external interface and stores the new sets into a weight memory (Mozer; page 3, paragraphs 0029-0030). In this manner, the system of Mozer does not require a complicated speech recognition engine or a large memory for storing the large vocabulary of recognized words (Mozer; page 3, paragraph 0028).

Applicants submit, however, that claims 6 and 19 are patentable over the Mozer reference. Specifically, Mozer fails to disclose a method or article of manufacture, respectively, capable of automatically providing a spoken language interface for a user with respect to at least one external network with which the user interacts, as required by the subject claims. In this regard, Applicants assert that the recognition set and weight set taught by Mozer are not analogous to the spoken language interface data set recited in the claimed invention and defined by the present specification. The recognition set disclosed in Mozer is merely a set of words recognized by the dedicated interface associated with the speech recognition system. While Mozer may disclose that the recognition system can select a new set of words and associated weights for recognizing a new user utterance (Mozer; page 3, paragraph 0033), Mozer fails to teach or suggest automatically providing a new spoken language interface for the user, as set forth in claim 6 and 19. Moreover, Mozer fails to teach

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or suggest dynamically changing an application of the speech recognition system. Rather, Mozer discloses a system that is dedicated to a single application (e.g., a compact disc changer application).

The present specification, at least at page 3, beginning at line 3, defines a spoken language interface data set as comprising:

> sets of user interface files. These are referred to as vocabularies files, prompt files, profiles and scripts depending on the role they play in structuring the interface. Vocabulary files provide tables relating possible user utterances with events and data that are understood by the target application. Prompt files provide sets of standard responses that may be used by applications to prompt the user to actions or inform the user about application status. Profiles set the parameters for the operation of the PSA hardware such as the voicing parameters used by the text to speech engine. . . Scripts provide instruction programming sequences of PSA services.

The recognition and weight sets disclosed in Mozer, by contrast, are not used to structure the spoken language interface itself, nor are they able to define parameters of operation of the speech recognition system. Therefore, such recognition and weight sets are clearly not analogous to the spoken language interface data set recited in the claimed invention. To further highlight the differences between the two types of data sets, from a system layer standpoint the recognition set and associated weight set of Mozer reside in a device/driver layer of the system, while the spoken language interface data set of the claimed invention resides in the operating system shell layer, which is a higher layer of the system.

For at least the reasons given above, Applicants assert that claims 6 and 19 are patentable over the cited prior art. Accordingly, favorable reconsideration and allowance of claims 6 and 19 are respectfully solicited.

With regard to claims 7, 13 and 14, which depend from claim 6, Applicants assert that these claims are also patentable over the prior art by virtue of their dependency from claim 6, which is believed to be patentable for at least the reasons set forth above. Moreover, one or more of these claims define additional patentable subject matter in their own right. For instance, claim 13 further defines the method of automatically providing a spoken language interface as prompting the user for information comprising a spoken utterance and "modifying at least one of a predetermined parameter

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of the device and an application running on the device" in response to the spoken utterance. The prior art of record fails to teach or suggest at least this feature of the claimed invention.

As per claim 13, the Examiner contends that such feature is taught by Mozer on page 3, paragraph 0029, where it states that "[t]he information presented to the user may include prompts for input to microphone 105 or application specific information." Applicants assert that this is well-known in the art. However, Mozer fails to teach or suggest that the system is capable of modifying one or more parameters of the system and/or an application running on the system in response to the user utterance, as expressly required by claim 13. While Mozer may disclose that "pattern recognition system 112 receives the recognition result and selects a new set of words and associated weight set based on this result" (Mozer; page 3, paragraph 0033), Applicants assert that merely selecting a new set of words to be recognized does not amount to modifying one or more operating parameters of the system. The pattern recognition system and related components of Mozer continue to operate in the same predefined manner.

For at least the above reasons, Applicants submit that claims 6, 7, 13, 14 and 19 are patentable over the Mozer reference, not merely by virtue of their dependency from claim 6, but also in their own right. Accordingly, favorable reconsideration and allowance of these claims are respectfully requested.

Claims 8 and 15-17 stand under § 103(a) as being unpatentable over Mozer, in view of "well-known prior art." Specifically, with regard to claims 8 and 16, the Examiner acknowledges that Mozer fails to teach a personal data/digital assistant (PDA) operatively coupled to the spoken language interface device (final Office Action; page 5, paragraph 3). However, the Examiner takes official notice and contends that such feature of the subject claims is well-known and would have been obvious to one of ordinary skill in the art. Applicants respectfully disagree with this contention and traverse the examiner's assertion of official notice.

With regard to claim 8, which depends from claim 6, Applicants assert that claim 8 is patentable over the prior art by virtue of its dependency from claim 6, which is believed to be patentable for at least the reasons set forth above. Applicants further assert that claim 16, like claim 6, requires requesting, receiving and loading a spoken language interface data set from an external

network which, as previously stated, is not analogous to selecting the recognition set and associated weight set, as disclosed in Mozer. Claims 8 and 16 also require operatively coupling the spoken language interface device with a personal digital/data assistant, which is not disclosed in the prior art.

While MPEP §2144.03 states that it may be permissible to take office notice in <u>certain rare circumstances</u>, "[o]fficial notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of <u>instant and unquestionable demonstration as being well-known</u>" (MPEP §2144.03(A); emphasis added). Applicants submit that while PDAs themselves may be well-known in the art, operatively coupling a PDA to a spoken language interface device, as required by claims 8 and 16, is not well-known, nor was it obvious to those skilled in the art at the time the invention was made. There exists no motivation or suggestion in the prior art of record to modify the teachings of Mozer in order to obtain the invention set forth in the subject claims.

With regard to claim 15, which depends from claim 6, and claim 17, which depends from claim 16, Applicants assert that these claims are also patentable over the prior art of record by virtue of their dependency from their respective independent claims, which are believed to be patentable for at the least the reasons given above. Furthermore, one or more of these claims define additional patentable subject matter in their own right. For instance, claim 15 further defines a step of prompting the user for information as including storing an internal data set and "selecting a prompt from a set of prompts for presentation to the user, the set of prompts including varying amounts of instruction based at least in part on information included in the internal data set." This feature, which is described in the present specification at least on page 36, lines 1-11 and on page 37, lines 14-17, advantageously allows the system to present a prompt to the user having a level of informational detail that reflects the user's familiarity with the application being used. Applicants submit that this feature is not taught or suggested by the prior art.

As per claim 15, the Examiner acknowledges that Mozer fails to teach such feature (final Office Action; page 6, paragraph 2). However, the Examiner takes official notice and contends that it is well-known to store a record of date, time and number of times that a predetermined procedure

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of an application is performed. The Examiner further contends that it would have been obvious to one skilled in the art to combine the taking of official notice with Mozer for accounting purposes "to calculate how many times and date and time each application and network [is] used" (final Office Action; page 6, paragraph 2). Applicants respectfully disagree with these contentions and traverse the examiner's assertion of official notice.

While storing a record of the date, time and/or number of times an application is performed may be well-known, the prior art of record fails to teach or suggest a process of selecting a prompt from a set of prompts for presentation to the user, the set of prompts including varying degrees of instruction based at least in part on information stored in an internal data set (e.g., reflecting a user's experience level with the application). As previously stated, MPEP §2144.03 permits the taking of official notice without documentary evidence only in certain rare circumstances in which the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known. This is clearly not the case here.

For at least the reasons given above, Applicants submit that claims 8 and 15-17 are patentable over the Mozer reference, in view of the taking of official notice. Accordingly, favorable reconsideration and allowance of claims 8 and 15-17 are respectfully requested.

Claims 1-5, 9-12 and 18 stand under §103(a) as being unpatentable over Mozer, in view of Abella. Specifically, with regard to claim 1, the Examiner contends that Mozer teaches a method for modifying a data structure containing at least one user interface data set. Although the Examiner acknowledges that Mozer and well-known prior art fail to teach various elements of the subject claim, including a spoken language interface apparatus comprising, among other components, a dialog manager and at least one user interface data set coupled to the dialog manager, the Examiner contends that such features are disclosed in Abella. Applicants respectfully disagree with these contentions.

Abella is directed to an object-oriented rule-based dialogue processing system "which allows a computer system or other dialogue processing system to conduct an efficient dialogue with a human user" (Abella; column 2, lines 32-35). The dialogue manager in Abella serves as an interface between the user and the application running on the system (Abella; column 2, lines 57-59). The

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dialog manager uses weights to determine which of a number of possible responses the system should generate based on a given user input received during the dialogue. The system of Abella makes use of the observation that the frames, properties and weights are generally specific to the particular application running on the system, but the objects and processing rules of the dialogue manager may remain unchanged regardless of the particular application (Abella; column 2, lines 49-54). The application-independent dialogue manager of Abella thus eliminates the need for an application developer to manually define the dialogue states and their interconnections (Abella; column 3, lines 58-61).

Applicants submit that claim 1 is patentable over the Mozer reference and the Abella reference, when considered either individually or in combination. Specifically, both Mozer and Abella fail to teach or suggest adding a new application to the device, generating a second user interface data set corresponding to the new application, transferring the second user interface data set from the device to the apparatus, and loading the second user interface data set into a data structure of the apparatus, as expressly set forth in claim 1. Like Mozer, the dialogue management techniques disclosed in Abella relate to a single dedicated application running on a system. Abella does not teach or suggest adding a new application to the system. Nor does Abella disclose generating a second user interface data set corresponding to the added application, as required by claim 1. Thus, at least in this respect, Abella fails to supplement the deficiencies of Mozer. Accordingly, favorable reconsideration and allowance of claim 1 is respectfully solicited.

With regard to claims 2-5 and 9-12, which depend from claim 1, and claim 18, which depends from claim 16, Applicants assert that these claims are also patentable over the prior art of record by virtue of their dependency from their respective independent claims, which are believed to be patentable for at the least the reasons given above. Furthermore, one or more of these claims define additional patentable subject matter in their own right. For instance, claim 3 further defines the method for modifying a data structure containing the at least one user interface data set as including the step of removing a user interface data set from the data structure. Likewise, claim 10 further defines the method as prompting the user for information comprising a spoken utterance, the device manager being responsive to the spoken utterance for modifying at least a predetermined

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<u>parameter of the device</u> and/or an application running on the device. The prior art of record fails to teach or suggest at least these additional features of the present invention.

As per claim 10, at column 7, beginning at line 37, Abella states:

The dialogue manager operates so as to direct a dialogue with a user in an attempt to satisfy a user request. The user request may be a request for a particular piece of information from a database . . ., a command . . ., or any other type of request. Irrespective of the particular task, the dialogue manager is configured to recognize the user request, determine when to initiate a dialogue, and decide what to ask the user so as to process the user request efficiently.

However, while Abella may disclose changing the prompt presented to the user in response to user input, Abella fails to teach or suggest modifying one or more operating parameters of the device and/or modifying the application itself in response to the spoken utterance.

For at least the above reasons, Applicants assert that claims 2-5, 9-12 and 18 are patentable over the prior art of record, not merely by virtue of their dependency from their respective claims, but also in their own right. Accordingly, favorable reconsideration and allowance of these claims are respectfully requested.

In view of the foregoing, Applicants believe that pending claims 1-19 are in condition for allowance and respectfully request withdrawal of the §102 and §103 rejections.

As indicated above, a Notice of Appeal is being submitted.

Respectfully submitted,

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